

**Remarks**

The Office Action mailed October 8, 2004 and made final, and the Advisory Action mailed March 11, 2005 have been carefully reviewed and the following remarks have been made in consequence thereof.

Claims 1-10 and 12-42 are pending in this application. Claims 1-10 and 12-42 stand rejected. Claim 11 has been canceled.

In accordance with 37 C.F.R. 1.136(a), a three-month extension of time is submitted herewith to extend the due date of the response to the Office Action dated October 8, 2004 and made final, and the Advisory Action dated March 11, 2005, for the above-identified patent application from January 8, 2005 through and including April 8, 2005. Authorization to charge a deposit account in the amount of \$1,020.00 to cover this extension of time request also is submitted herewith.

The rejection of Claims 1-10 and 12-42 under 35 U.S.C. § 112, first paragraph, is respectfully traversed.

Applicants respectfully submit that the specification meets the requirements of Section 112, first paragraph. Specifically, Applicants respectfully submit that the specification, including the figures, would enable one skilled in the art to make and/or use the invention as described in the present patent application. Accordingly, Applicants respectfully request that the rejection of Claims 1-10 and 12-42 under Section 112, first paragraph, be withdrawn.

The Office Action asserts at page 2 that “Claims 1-10 and 12-42 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement...The verb ‘underwriting’ is not defined within the specification and is not being used in this application as defined by standard business and investment dictionaries...In those dictionaries underwriting is defined to mean taking on risk for profit regarding the purchase and resale of New Issues of Secondary offerings only: it has nothing to do with valuation of securities already issued and in an investment portfolio.” Applicants respectfully traverse this assertion.

More specifically, in contrast to what is asserted in the Office Action, Applicants respectfully submit that the term “underwriting” is clearly defined within the specification of the present application. For example, Applicants direct the Examiner to page 6, lines 13-20 of the specification which provides as follows:

“Underwriting” as used herein means a process in which a person (“underwriter”) reviews an asset in accordance with established principles and determines a current purchase price for buying the asset. During underwriting, the underwriter uses pre-existing or established criteria 80 for the valuations. “Criteria” means rules relevant to asset value and a rating based on such categories. For example, as a criteria, an underwriter might determine three years of cash flow history of the borrower to be a category of information relevant to asset valuation and might give a certain rating to various levels of cash flow.

In other words, the specification clearly defines the term “underwriting” to mean a process in which a person reviews an asset in accordance with established principles and determines a current purchase price for buying the asset. According to the specification, the underwriting process further includes determining a confidence factor associated with the determined purchase price (see for example page 9, line 8 – page 10, line 19). The presently pending claims recite the term “underwriting” and use the term in a manner consistent with the definition provided in the specification.

Moreover, independent Claims 1, 12, 23 and 34 have been amended to include the recitation “wherein underwriting includes analyzing an asset in accordance with predetermined criteria, and determining a current purchase price for buying the asset and a confidence factor associated with the determined purchase price based on the analysis”. For example, Claim 1 recites a “computer implemented method for finding value and reducing risk in purchasing portfolios of assets using a computer coupled to a database, said method comprising the steps of...calculating an initial value of each asset included within a portfolio of assets...and recalculating the value of each asset included within the portfolio, the recalculation is performed using the computer to perform the steps of...fully underwriting each asset included within a first portion of the portfolio to produce a value of each asset included within the first portion of the portfolio, wherein underwriting includes analyzing an asset in accordance with predetermined criteria, and determining a current purchase price for buying the asset and a confidence factor associated with the determined purchase price based on the analysis...underwriting a sample of

assets included within a second portion of the portfolio to calculate a value of each asset included within the second portion of the portfolio based on the underwritten sample assets....” Applicants submit that the term “underwriting” as recited in the claims is defined within the specification and is used in a manner that is consistent with the meaning provided in the specification.

Applicants therefore respectfully submit that the specification, including the figures, would enable one skilled in the art to make and/or use the invention as described in the present patent application including enabling one skilled in the art to understand the meaning of the term “underwriting” as used in the presently pending claims. Accordingly, Applicants respectfully request that the rejection of Claims 1-10 and 12-42 under Section 112, first paragraph, be withdrawn.

For the reasons set forth above, Applicants respectfully request that the rejection of Claims 1-10 and 12-42 under Section 112, first paragraph, be withdrawn.

The rejection of Claims 1-10 and 12-42 under 35 U.S.C. § 112, second paragraph, is respectfully traversed.

Applicants respectfully submit that Claims 1-10 and 12-42 satisfy section 112, second paragraph. More specifically, Applicants respectfully submit that Claims 1-10 and 12-42 are definite and particularly point out and distinctly claim the subject matter of the invention. According to page 2 of the Office Action, these claims have been rejected because the “verb ‘underwriting’ is not defined within the specification and is not being used in this application as defined by standard business and investment dictionaries....” Applicants respectfully traverse this assertion.

As stated above, the term “underwriting” is clearly defined within the specification of the present application. For example, the specification provides at page 6, lines 13-20 as follows:

“Underwriting” as used herein means a process in which a person (“underwriter”) reviews an asset in accordance with established principles and determines a current purchase price for buying the asset. During underwriting, the underwriter uses pre-existing or established criteria for the valuations. “Criteria” means rules relevant to asset value and a rating based on such categories. For example, as a criteria, an underwriter might determine three years of cash flow history of the

borrower to be a category of information relevant to asset valuation and might give a certain rating to various levels of cash flow.

The specification clearly defines the term “underwriting” to mean a process in which a person reviews an asset in accordance with established principles and determines a current purchase price for buying the asset. According to the specification, the underwriting process further includes determining a confidence factor associated with the determined purchase price (see for example page 9, line 8 – page 10, line 19). The presently pending claims recite the term “underwriting” and use the term in a manner consistent with the definition provided in the specification.

Moreover, independent Claims 1, 12, 23 and 34 have been amended to include the recitation “wherein underwriting includes analyzing an asset in accordance with predetermined criteria, and determining a current purchase price for buying the asset and a confidence factor associated with the determined purchase price based on the analysis”. Applicants therefore respectfully submit that Claims 1-10 and 12-42 are definite and particularly point out and distinctly claim the subject matter of the invention. Accordingly, Applicants respectfully request that Claims 1-10 and 12-42 satisfy Section 112, second paragraph.

For at least the reasons set forth above, Applicants respectfully request that the Section 112, second paragraph rejection of Claims 1-10 and 12-42 be withdrawn.

The rejection of Claims 1-10 and 23 and 34-42 under 35 U.S.C. § 101 as being directed to non-statutory subject matter is respectfully traversed.

The Office Action asserts at page 3 that “the claimed invention is directed to non-statutory subject matter” because the “invention in the body of the claim must recite technology.” The Office Action further asserts that “If the invention in the body of the claim is not tied to technological art, environment, or machine, the claim is not statutory.” Applicants respectfully traverse this assertion. More specifically, Applicants respectfully submit that the body of Claims 1-10 and 23 and 34-42 recite technology, namely a computer, and therefore, Claims 1-10 and 23 and 34-42 satisfy Section 101.

For example, Claim 1 recites a “computer implemented method for finding value and reducing risk in purchasing portfolios of assets using a computer coupled to a database, said

method comprising the steps of...calculating an initial value of each asset included within a portfolio of assets...and recalculating the value of each asset included within the portfolio, the recalculation is performed using the computer to perform the steps of...fully underwriting each asset included within a first portion of the portfolio to produce a value of each asset included within the first portion of the portfolio....” (Emphasis added). Applicants respectfully submit that Claim 1 recites in the preamble “a computer implemented method” that uses “a computer coupled to a database” and recites in the body of the claim “the recalculation is performed using the computer to perform the steps of...” The computer is technology recited in the body of Claim 1. Accordingly, Applicants submit that Claim 1 satisfies the requirements of Section 101.

Dependent Claims 2-10 depend from independent Claim 1, and these dependent Claims are submitted to satisfy the requirements of Section 101 for the same reasons set forth above with respect to independent Claim 1.

With respect to Claim 23, Applicants respectfully traverse the suggestion that “the claimed invention is directed to non-statutory subject matter” because “the body of the claim is not tied to technological art, environment, or machine”. Claim 23 recites a “computer for finding value and reducing risk in purchasing portfolios of assets, said computer including a database of asset portfolios, said computer programmed to...calculate an initial value of each asset included within a portfolio...and recalculate the value of each asset included within the portfolio by....” Applicants submit that a computer programmed to calculate values and recalculate values as recited in Claim 23 includes technology (i.e., a computer) in the body of the claim. Accordingly, the computer recited in Claim 23 is within the technological arts, and is therefore patentable subject matter. Applicants submit that Claim 23 satisfies the requirements of Section 101.

Claim 34 recites a “computer implemented method for finding value and reducing risk in purchasing portfolios of assets using a computer coupled to a database, said method comprising the steps of...segmenting a portfolio of assets into three portions for valuation purposes...statistically inferring a value of each asset included within a third portion of the portfolio using an iterative process...the statistical inferring is performed by the computer...and using the computer to output a total value of the portfolio based on the value of each asset included within the first portion, the second portion, and the third portion of the portfolio.”

(Emphasis added). Applicants respectfully submit that Claim 34 recites “a computer implemented method” that uses “a computer coupled to a database” in the preamble and recites “the statistical inferring is performed by the computer” and “using the computer to output a total value of the portfolio” in the body of the claim. The computer is technology recited in the body of Claim 34. Accordingly, Applicants submit that Claim 34 satisfies the requirements of Section 101.

Dependent Claims 35-42 depend from independent Claim 34, and these dependent Claims are submitted to satisfy the requirements of Section 101 for the same reasons set forth above with respect to independent Claim 34.

For at least the reasons set forth above, Applicants respectfully request that the Section 101 rejection of Claims 1-10 and 23 and 34-42 be withdrawn.

The rejection of Claims 1-10 and 12-42 under 35 U.S.C. § 103(a) as being unpatentable over Bukowsky (U.S. Pat. No. 5,934,674) in view of Tull et al. (U.S. Pat. No. 5,946,667) (“Tull”) and Downes, Dictionary of Finance and Investment Terms (1998) (“Downes”) is respectfully traversed.

Applicants respectfully submit that none of Bukowsky, Tull or Downes, considered alone or in combination, describe or suggest the claimed invention. As discussed below, none of Bukowsky, Tull or Downes, considered alone or in combination, describe or suggest calculating an initial value of each asset included within a portfolio of assets, and recalculating the value of each asset included within the portfolio wherein the recalculation is performed using the computer to perform the steps of: fully underwriting each asset included within a first portion of the portfolio to produce a value of each asset included within the first portion of the portfolio wherein underwriting includes analyzing an asset in accordance with predetermined criteria, and determining a current purchase price for buying the asset and a confidence factor associated with the determined purchase price based on the analysis, underwriting a sample of assets included within a second portion of the portfolio to calculate a value of each asset included within the second portion of the portfolio based on the underwritten sample assets wherein each sample asset having descriptive attributes common to at least one non-sample asset included within the second portion such that each sample asset represents at least one non-sample asset included within the

second portion, and statistically inferring a value of each asset included within a third portion of the portfolio using an iterative process including grouping the assets included within the third portion of the portfolio into clusters based on underwriting values and variances of the first and second portions of the portfolio.

More specifically, no combination of Bukowsky, Tull or Downes describes or suggests recalculating the value of each asset included within a portfolio by fully underwriting each asset included within a first portion of the portfolio to produce a value of each asset included within the first portion of the portfolio wherein underwriting includes analyzing an asset in accordance with predetermined criteria, and determining a current purchase price for buying the asset and a confidence factor associated with the determined purchase price based on the analysis. (Emphasis added.) In fact, none of Bukowsky, Tull or Downes describes or suggests underwriting assets to produce a value.

Moreover, no combination of Bukowsky, Tull or Downes describes or suggests recalculating the value of each asset included within a portfolio by underwriting a sample of assets included within a second portion of the portfolio to calculate a value of each asset included within the second portion of the portfolio based on the underwritten sample assets wherein each sample asset having descriptive attributes common to at least one non-sample asset included within the second portion such that each sample asset represents at least one non-sample asset included within the second portion. (Emphasis added.) In fact, none of Bukowsky, Tull or Downes describes or suggests underwriting a sample of assets to calculate a value of each assets.

Furthermore, no combination of Bukowsky, Tull or Downes describes or suggests recalculating the value of each asset included within a portfolio by statistically inferring a value of each asset included within a third portion of the portfolio using an iterative process including grouping the assets included within the third portion of the portfolio into clusters based on underwriting values and variances of the first and second portions of the portfolio. (Emphasis added.) In fact, none of Bukowsky, Tull or Downes describes or suggests statistically inferring a value of an asset.

Additionally, it does not appear that the Office Action specifically addresses any of these recitations, which were added to the presently pending claims as part of an Amendment filed June 30, 2004. Applicants respectfully request that the Examiner specifically address these recitations in any future Office Actions. The Office Action also fails to specifically address the recitations of the dependent claims. Applicants respectfully request that the Examiner specifically address the recitations of the dependent claims in any future Office Actions.

The Office Action also indicates that the Examiner has taken Office Notice that “because it has long been common and well known since at least the 1980s, and particularly since the early 1990s, to value securities in portfolios over a network using computers and recalculating the value whenever prices changed it would have been obvious to one skilled in the art at the time of the invention to do so in whatever format or sets or sequence as would be convenient and advantageous.” Applicants traverse the Official Notice.

Official Notice may be used for “facts...capable of such instant and unquestionable demonstration as to defy dispute”. (See In re Ahlert, 424 F.2d 1088, 165 USPQ 418, 420 (CCPA 1970). Applicants submit that the Official Notice provided in the Office Action does not include facts that are capable of instant and unquestionable demonstration as to defy dispute. More specifically, Applicants submit that the assertion that it would have been obvious to one skilled in the art to calculate and recalculate the value of securities in portfolios using computers and “to do so in whatever format or sets or sequence as would be convenient and advantageous” is not a fact that is capable of instant and unquestionable demonstration as to defy dispute. Accordingly, Applicants submit that the Official Notice taken in the Office Action is improper.

In addition, Applicants respectfully submit that the Office Action fails to provide any support for the Official Notice, namely that it would have been obvious to one skilled in the art to calculate and recalculate the value of securities in portfolios using computers and “to do so in whatever format or sets or sequence as would be convenient and advantageous.” In fact, Applicants respectfully submit that the phrase “to do so in whatever format or sets or sequence as would be convenient and advantageous” fails to provide Applicants with sufficient notice as to exactly what the Examiner is referring to and taking Official Notice of when making such an assertion. Applicants respectfully request that the Examiner provide support for the Official



Notice and clarify what is meant by the phrase “to do so in whatever format or sets or sequence as would be convenient and advantageous”.

Bukowsky describes a stock market game that includes a game board (10) and an electronic display (18). Electronic display (18) includes processing unit (20) for controlling a stock value display (22) and a portfolio value display (24). Processing unit (20) determines the value of the portfolio in accordance with a selected valuation algorithm (28) and the present value for the stock. The values of stocks during game play are generated by a random number module (23) that randomly alters the values of stocks to mimic rising and falling stock prices. During game play, players are required to push one of a bull or bear market button (38 or 36), which activates the random number module (23) to recalculate the values of each of the stocks. Notably, Bukowsky does not describe, teach or even mention (i) underwriting any assets to produce or calculate a value of assets in a portfolio wherein underwriting includes analyzing an asset in accordance with predetermined criteria and determining a current purchase price for buying the asset based on the analysis, (ii) underwriting a sample of assets included within a second portion of the portfolio to calculate a value of each asset included within the second portion of the portfolio, or (iii) statistically inferring a value of an asset in a portfolio using an iterative process.

Rather, Bukowsky describes a stock market game that uses valuation algorithms (28) stored within a memory such that a processor unit (20) determines the value of the portfolio in accordance with the selected valuation algorithm (28). The result is displayed on the portfolio value display (24). The values of stocks during game play are generated by a random number module (23) that randomly alters the values of stocks to mimic rising and falling stock prices.

Tull describes a financial management structure (8) that includes a modeling system (3), financial debt instruments (10) traded to investors as single securities, and a data processing system (20) designed to administer the transactions associated with debt instruments (10). Modeling system (3) selects an optimized basket of shares which is representative of a particular capital market. The basket of shares is selected by a programming function that receives and stores data about each stock in the capital market, correlates the available data with economic forecast models to suggest an optimal basket of stock shares which can model the performance of the overall market, and predicts the future correlation of the selected stocks in the baskets with the

index of the market to ensure that they will track the market index closely. Debt instruments (10) created by financial management structure (8) are designed to be traded as Optimized Portfolio Listed Securities (OPALS). Data processing system (20) continuously monitors the price of the underlying basket of shares and computes the aggregate value of the underlying basket of shares based on the current market price of each of the stocks in the OPALS. Notably, Tull does not describe underwriting assets to produce or calculate a value of the assets in a portfolio, nor does Tull describe statistically inferring a value of an asset in a portfolio using an iterative process.

Downes is a dictionary of finance and investment terms. It includes a definition for the term “underwrite”. However, as discussed above, the term “underwriting” is defined within the specification of the present application at page 6, lines 13-20.

Claim 1 recites a computer implemented method for finding value and reducing risk in purchasing portfolios of assets using a computer coupled to a database, the method includes “calculating an initial value of each asset included within a portfolio of assets...and recalculating the value of each asset included within the portfolio, the recalculation is performed using the computer to perform the steps of...fully underwriting each asset included within a first portion of the portfolio to produce a value of each asset included within the first portion of the portfolio, wherein underwriting includes analyzing an asset in accordance with predetermined criteria, and determining a current purchase price for buying the asset and a confidence factor associated with the determined purchase price based on the analysis...underwriting a sample of assets included within a second portion of the portfolio to calculate a value of each asset included within the second portion of the portfolio based on the underwritten sample assets, each sample asset having descriptive attributes common to at least one non-sample asset included within the second portion such that each sample asset represents at least one non-sample asset included within the second portion...and statistically inferring a value of each asset included within a third portion of the portfolio using an iterative process including grouping the assets included within the third portion of the portfolio into clusters based on underwriting values and variances of the first and second portions of the portfolio.”

None of Bukowsky, Tull or Downes, considered alone or in combination, describe or suggest a computer implemented method for finding value and reducing risk in purchasing

portfolios of assets as recited in Claim 1. More specifically, none of Bukowsky, Tull or Downes, considered alone or in combination, describe or suggest a computer implemented method for finding value and reducing risk in purchasing portfolios of assets that includes recalculating the value of each asset included within the portfolio wherein the recalculation is performed using the computer to perform the steps of fully underwriting each asset included within a first portion of the portfolio to produce a value of each asset included within the first portion of the portfolio wherein underwriting includes analyzing an asset in accordance with predetermined criteria, and determining a current purchase price for buying the asset and a confidence factor associated with the determined purchase price based on the analysis, underwriting a sample of assets included within a second portion of the portfolio to calculate a value of each asset included within the second portion of the portfolio based on the underwritten sample assets wherein each sample asset having descriptive attributes common to at least one non-sample asset included within the second portion such that each sample asset represents at least one non-sample asset included within the second portion, and statistically inferring a value of each asset included within a third portion of the portfolio using an iterative process including grouping the assets included within the third portion of the portfolio into clusters based on underwriting values and variances of the first and second portions of the portfolio.

In fact, no combination of Bukowsky, Tull or Downes describes or suggests recalculating the value of each asset included within a portfolio by fully underwriting each asset included within a first portion of the portfolio to produce a value of each asset included within the first portion of the portfolio wherein underwriting includes analyzing an asset in accordance with predetermined criteria, and determining a current purchase price for buying the asset and a confidence factor associated with the determined purchase price based on the analysis, underwriting a sample of assets included within a second portion of the portfolio to calculate a value of each asset included within the second portion of the portfolio based on the underwritten sample assets wherein each sample asset having descriptive attributes common to at least one non-sample asset included within the second portion such that each sample asset represents at least one non-sample asset included within the second portion, or statistically inferring a value of each asset included within a third portion of the portfolio using an iterative process including grouping the assets included

within the third portion of the portfolio into clusters based on underwriting values and variances of the first and second portions of the portfolio. (Emphasis added.)

Rather, in contrast to the present invention, Bukowsky describes a stock market game that uses a random number module to generate the values of stocks during game play to mimic rising and falling stock prices and to recalculate the values of each of the stocks as the game progresses; Tull describes a financial management structure that includes a modeling system, financial debt instruments traded to investors as single securities, and a data processing system designed to administer the transactions associated with the debt instruments; and Downes defines the term “underwrite” to include “to assume risk in exchange for a premium” or “to assume the risk of buying a new issue of securities from the issuing corporation....”

Although Bukowsky describes a stock market game that uses a random number module to generate the values of stocks during game play to mimic rising and falling stock prices and to recalculate the values of each of the stocks as the game progresses, Bukowsky does not describe or suggest recalculating the value of each asset included within a portfolio by fully underwriting each asset included within a first portion of the portfolio to produce a value of each asset included within the first portion of the portfolio wherein underwriting includes analyzing an asset in accordance with predetermined criteria, and determining a current purchase price for buying the asset and a confidence factor associated with the determined purchase price based on the analysis, underwriting a sample of assets included within a second portion of the portfolio to calculate a value of each asset included within the second portion of the portfolio based on the underwritten sample assets wherein each sample asset having descriptive attributes common to at least one non-sample asset included within the second portion such that each sample asset represents at least one non-sample asset included within the second portion, or statistically inferring a value of each asset included within a third portion of the portfolio using an iterative process including grouping the assets included within the third portion of the portfolio into clusters based on underwriting values and variances of the first and second portions of the portfolio. (Emphasis added.) In fact, Bukowsky fails to mention any of these recitations.

Tull describes a financial management structure that includes a modeling system, financial debt instruments traded to investors as single securities, and a data processing system designed to

administer the transactions associated with the debt instruments. The modeling system selects an optimized basket of stocks using a programming function that receives and stores data about each stock, correlates the available data with economic forecast models to suggest an optimal basket of stock shares, and predicts the future correlation of the selected stocks in the baskets with the index of the market to ensure that they will track the market index closely. The data processing system continuously monitors the price of the underlying basket of shares and computes the aggregate value of the underlying basket of shares based on the current market price of each of the debt instruments. Although Tull describes a structure that calculates an initial value of each asset included within a portfolio of assets, and recalculating the value of each asset included within the portfolio, Tull does not describe or suggest fully underwriting each asset included within a first portion of the portfolio to produce a value of each asset included within the first portion of the portfolio wherein underwriting includes analyzing an asset in accordance with predetermined criteria, and determining a current purchase price for buying the asset and a confidence factor associated with the determined purchase price based on the analysis.

Moreover, Tull does not describe or suggest underwriting a sample of assets included within a second portion of the portfolio to calculate a value of each asset included within the second portion of the portfolio based on the underwritten sample assets wherein each sample asset having descriptive attributes common to at least one non-sample asset included within the second portion such that each sample asset represents at least one non-sample asset included within the second portion. Furthermore, Tull does not describe or suggest statistically inferring a value of each asset included within a third portion of the portfolio using an iterative process including grouping the assets included within the third portion of the portfolio into clusters based on underwriting values and variances of the first and second portions of the portfolio.

Downes defines the term “underwrite”. However, Downes does not describe or teach any of the recitations included within Claim 1. Accordingly, Applicants respectfully submit that Claim 1 is patentable over Bukowsky in view of Tull and Downes.

For at least the reasons set forth above, Applicants respectfully submit that Claim 1 is patentable over Bukowsky in view of Tull and Downes.

Claim 11 has been canceled. Claims 2-10 depend from independent Claim 1 which is submitted to be in condition for allowance. When the recitations of Claims 2-10 are considered in combination with the recitations of Claim 1, Applicants submit that dependent Claims 2-10 are also patentable over Bukowsky in view of Tull and Downes.

Claim 12 recites a portfolio valuation system for finding value and reducing risk in purchasing portfolios of assets, the system includes a computer configured as a server and further configured with a database of asset portfolios and to enable valuation process analytics, at least one client system connected to the server through a network, the server configured to “calculate an initial value of each asset included within a portfolio...and recalculate the value of each asset included within the portfolio by...calculating a value of each asset included within a first portion of the portfolio after fully underwriting each asset included within the first portion of the portfolio, wherein underwriting includes analyzing an asset in accordance with predetermined criteria, and determining a current purchase price for buying the asset and a confidence factor associated with the determined purchase price based on the analysis...calculating a value of each asset included within a second portion of the portfolio based on an underwriting of a sample of assets included within the second portion of the portfolio, each sample asset having descriptive attributes common to at least one non-sample asset included within the second portion such that each sample asset represents at least one non-sample asset included within the second portion...and statistically inferring a value of each asset included within a third portion of the portfolio using an iterative process including grouping the assets included within the third portion of the portfolio into clusters based on underwriting values and variances of the first and second portions of the portfolio.”

None of Bukowsky, Tull or Downes, considered alone or in combination, describe or suggest a portfolio valuation system as recited in Claim 12. More specifically, none of Bukowsky, Tull or Downes, considered alone or in combination, describe or suggest a server configured to recalculate the value of each asset included within the portfolio by calculating a value of each asset included within a first portion of the portfolio after fully underwriting each asset included within the first portion of the portfolio wherein underwriting includes analyzing an asset in accordance with predetermined criteria, and determining a current purchase price for buying the asset and a confidence factor associated with the determined purchase price based on the analysis,

calculating a value of each asset included within a second portion of the portfolio based on an underwriting of a sample of assets included within the second portion of the portfolio wherein each sample asset having descriptive attributes common to at least one non-sample asset included within the second portion such that each sample asset represents at least one non-sample asset included within the second portion, or statistically inferring a value of each asset included within a third portion of the portfolio using an iterative process including grouping the assets included within the third portion of the portfolio into clusters based on underwriting values and variances of the first and second portions of the portfolio. (Emphasis added.)

Rather, in contrast to the present invention, Bukowsky describes a stock market game that uses a random number module to generate the values of stocks during game play to mimic rising and falling stock prices and to recalculate the values of each of the stocks as the game progresses; Tull describes a financial management structure that includes a modeling system, financial debt instruments traded to investors as single securities, and a data processing system designed to administer the transactions associated with the debt instruments; and Downes defines the term “underwrite”.

Although Bukowsky describes a stock market game that uses a random number module to generate the values of stocks during game play to mimic rising and falling stock prices and to recalculate the values of each of the stocks as the game progresses, Bukowsky does not describe or suggest a server configured to recalculate the value of each asset included within a portfolio by calculating a value of each asset included within a first portion of the portfolio after fully underwriting each asset included within the first portion of the portfolio, calculating a value of each asset included within a second portion of the portfolio based on an underwriting of a sample of assets included within the second portion of the portfolio, or statistically inferring a value of each asset included within a third portion of the portfolio using an iterative process including grouping the assets included within the third portion of the portfolio into clusters based on underwriting values and variances of the first and second portions of the portfolio. In fact, Bukowsky fails to even mention any of these recitations.

Tull describes a financial management structure that includes a modeling system, financial debt instruments traded to investors as single securities, and a data processing system designed to

administer the transactions associated with the debt instruments. The modeling system selects an optimized basket of stocks using a programming function that receives and stores data about each stock, correlates the available data with economic forecast models to suggest an optimal basket of stock shares, and predicts the future correlation of the selected stocks in the baskets with the index of the market to ensure that they will track the market index closely. The data processing system continuously monitors the price of the underlying basket of shares and computes the aggregate value of the underlying basket of shares based on the current market price of each of the debt instruments. Although Tull describes a structure that calculates an initial value of each asset included within a portfolio of assets, and recalculating the value of each asset included within the portfolio, Tull does not describe or suggest fully underwriting each asset included within a first portion of the portfolio to produce a value of each asset included within the first portion of the portfolio. Moreover, Tull does not describe or suggest underwriting a sample of assets included within a second portion of the portfolio to calculate a value of each asset included within the second portion of the portfolio based on the underwritten sample assets. Furthermore, Tull does not describe or suggest statistically inferring a value of each asset included within a third portion of the portfolio using an iterative process including grouping the assets included within the third portion of the portfolio into clusters based on underwriting values and variances of the first and second portions of the portfolio. Accordingly, Applicants respectfully submit that Claim 12 is patentable over Bukowsky in view of Tull and Downes.

For at least the reasons set forth above, Applicants respectfully submit that Claim 12 is patentable over Bukowsky in view of Tull and Downes.

Claims 13-22 depend from independent Claim 12 which is submitted to be in condition for allowance. When the recitations of Claims 13-22 are considered in combination with the recitations of Claim 12, Applicants submit that dependent Claims 13-22 are also patentable over Bukowsky in view of Tull and Downes.

Claim 23 recites a computer for finding value and reducing risk in purchasing portfolios of assets, wherein the computer includes a database of asset portfolios, and wherein the computer is programmed to “calculate an initial value of each asset included within a portfolio...and recalculate the value of each asset included within the portfolio by...calculating a value of each



asset included within a first portion of the portfolio after fully underwriting each asset included within the first portion of the portfolio, wherein underwriting includes analyzing an asset in accordance with predetermined criteria, and determining a current purchase price for buying the asset and a confidence factor associated with the determined purchase price based on the analysis...calculating a value of each asset included within a second portion of the portfolio based on an underwriting of a sample of assets included within a the second portion of the portfolio, each sample asset having descriptive attributes common to at least one non-sample asset included within the second portion such that each sample asset represents at least one non-sample asset included within the second portion...and statistically inferring a value of each asset included within a third portion of the portfolio using an iterative process including grouping the assets included within the third portion of the portfolio into clusters based on underwriting values and variances of the first and second portions of the portfolio.”

None of Bukowsky, Tull or Downes, considered alone or in combination, describe or suggest a computer as recited in Claim 23. More specifically, none of Bukowsky, Tull or Downes, considered alone or in combination, describe or suggest a computer programmed to calculate an initial value of each asset included within a portfolio, and recalculate the value of each asset included within the portfolio by calculating a value of each asset included within a first portion of the portfolio after fully underwriting each asset included within the first portion of the portfolio wherein underwriting includes analyzing an asset in accordance with predetermined criteria, and determining a current purchase price for buying the asset and a confidence factor associated with the determined purchase price based on the analysis, calculating a value of each asset included within a second portion of the portfolio based on an underwriting of a sample of assets included within the second portion of the portfolio wherein each sample asset having descriptive attributes common to at least one non-sample asset included within the second portion such that each sample asset represents at least one non-sample asset included within the second portion, or statistically inferring a value of each asset included within a third portion of the portfolio using an iterative process including grouping the assets included within the third portion of the portfolio into clusters based on underwriting values and variances of the first and second portions of the portfolio. (Emphasis added.)

Rather, in contrast to the present invention, Bukowsky describes a stock market game that uses a random number module to generate the values of stocks during game play to mimic rising and falling stock prices and to recalculate the values of each of the stocks as the game progresses; Tull describes a financial management structure that includes a modeling system, financial debt instruments traded to investors as single securities, and a data processing system designed to administer the transactions associated with the debt instruments; and Downes merely defines the term “underwrite”.

Notably, no combination of Bukowsky, Tull or Downes describes or suggests calculating a value of each asset included within a first portion of the portfolio after fully underwriting each asset included within the first portion of the portfolio, calculating a value of each asset included within a second portion of the portfolio based on an underwriting of a sample of assets included within a second portion of the portfolio, or statistically inferring a value of each asset included within a third portion of the portfolio using an iterative process including grouping the assets included within the third portion of the portfolio into clusters based on underwriting values and variances of the first and second portions of the portfolio. Accordingly, Applicants respectfully submit that Claim 23 is patentable over Bukowsky in view of Tull and Downes.

For at least the reasons set forth above, Applicants respectfully submit that Claim 23 is patentable over Bukowsky in view of Tull and Downes.

Claims 24-33 depend from independent Claim 23 which is submitted to be in condition for allowance. When the recitations of Claims 24-33 are considered in combination with the recitations of Claim 23, Applicants submit that dependent Claims 24-33 are also patentable over Bukowsky in view of Tull and Downes.

Claim 34 recites a computer implemented method for finding value and reducing risk in purchasing portfolios of assets using a computer coupled to a database, the method includes “segmenting a portfolio of assets into three portions for valuation purposes...fully underwriting each asset included within a first portion of the portfolio to produce a value of each asset included within the first portion of the portfolio, wherein underwriting includes analyzing an asset in accordance with predetermined criteria, and determining a current purchase price for buying the

asset and a confidence factor associated with the determined purchase price based on the analysis...underwriting a sample of assets included within a second portion of the portfolio to calculate a value of each asset included within the second portion of the portfolio based on the underwritten sample assets, each sample asset having descriptive attributes common to at least one non-sample asset included within the second portion such that each sample asset represents at least one non-sample asset included within the second portion...statistically inferring a value of each asset included within a third portion of the portfolio using an iterative process including grouping the assets included within the third portion of the portfolio into clusters based on underwriting values and variances of the first and second portions of the portfolio, the statistical inferring is performed by the computer...and using the computer to output a total value of the portfolio based on the value of each asset included within the first portion, the second portion, and the third portion of the portfolio.”

None of Bukowsky, Tull or Downes, considered alone or in combination, describe or suggest a computer implemented method as recited in Claim 34. More specifically, none of Bukowsky, Tull or Downes, considered alone or in combination, describe or suggest a computer implemented method that includes segmenting a portfolio of assets into three portions for valuation purposes, fully underwriting each asset included within a first portion of the portfolio to produce a value of each asset included within the first portion of the portfolio wherein underwriting includes analyzing an asset in accordance with predetermined criteria, and determining a current purchase price for buying the asset and a confidence factor associated with the determined purchase price based on the analysis, underwriting a sample of assets included within a second portion of the portfolio to calculate a value of each asset included within the second portion of the portfolio based on the underwritten sample assets wherein each sample asset having descriptive attributes common to at least one non-sample asset included within the second portion such that each sample asset represents at least one non-sample asset included within the second portion, or statistically inferring a value of each asset included within a third portion of the portfolio using an iterative process including grouping the assets included within the third portion of the portfolio into clusters based on underwriting values and variances of the first and second portions of the portfolio. (Emphasis added.)

Moreover, no combination of Bukowsky, Tull or Downes describe or suggest a computer implemented method that includes using the computer to output a total value of the portfolio based on the value of each asset included within the first portion, the second portion, and the third portion of the portfolio.

Rather, in contrast to the present invention, Bukowsky describes a stock market game that uses a random number module to generate the values of stocks during game play to mimic rising and falling stock prices and to recalculate the values of each of the stocks as the game progresses; Tull describes a financial management structure that includes a modeling system, financial debt instruments traded to investors as single securities, and a data processing system designed to administer the transactions associated with the debt instruments; and Downes merely defines the term “underwrite”.

Notably, none of the references, alone or in combination, describe or suggest segmenting a portfolio of assets into three portions for valuation purposes, fully underwriting each asset included within a first portion of the portfolio to produce a value of each asset included within the first portion of the portfolio, underwriting a sample of assets included within a second portion of the portfolio to calculate a value of each asset included within the second portion of the portfolio based on the underwritten sample assets, or statistically inferring a value of each asset included within a third portion of the portfolio using an iterative process including grouping the assets included within the third portion of the portfolio into clusters based on underwriting values and variances of the first and second portions of the portfolio. Accordingly, Applicants respectfully submit that Claim 34 is patentable over Bukowsky in view of Tull and Downes.

For at least the reasons set forth above, Applicants respectfully submit that Claim 34 is patentable over Bukowsky in view of Tull and Downes.

Claims 35-42 depend from independent Claim 34 which is submitted to be in condition for allowance. When the recitations of Claims 35-42 are considered in combination with the recitations of Claim 34, Applicants submit that dependent Claims 35-42 are also patentable over Bukowsky in view of Tull and Downes.

In addition to the arguments set forth above, Applicants also respectfully submit that the Section 103 rejections of the presently pending claims is not a proper rejection. Obviousness cannot be established by merely suggesting that it would have been obvious to one of ordinary skill in the art to modify Bukowsky using the teachings of Tull and Downes. More specifically, as is well established, obviousness cannot be established by combining the teachings of the cited art to produce the claimed invention, absent some teaching, suggestion, or incentive supporting the combinations. It is impermissible to use the claimed invention as an instruction manual or "template" to piece together the teachings of the prior art so that the claimed invention is rendered obvious. Specifically, one cannot use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to deprecate the claimed invention. Further, it is impermissible to pick and choose from any one reference only so much of it as will support a given position, to the exclusion of other parts necessary to the full appreciation of what such reference fairly suggests to one of ordinary skill in the art.

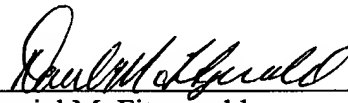
As the Federal Circuit has recognized, obviousness is not established merely by combining references having different individual elements of pending claims. Ex parte Levengood, 28 U.S.P.Q.2d 1300 (Bd. Pat. App. & Inter. 1993). MPEP 2143.01. Rather, there must be some suggestion, outside of Applicants' disclosure, in the prior art to combine such references, and a reasonable expectation of success must be both found in the prior art, and not based on Applicants' disclosure. In re Vaeck, 20 U.S.P.Q.2d 1436 (Fed. Cir. 1991). In the present case, neither a suggestion or motivation to combine the prior art disclosures, nor any reasonable expectation of success has been shown.

None of Bukowsky, Tull or Downes, considered alone or in combination, describe or suggest the claimed combination. Rather, the section 103 rejection of Claims 1-10 and 12-31 over Bukowsky in view of Tull and Downes appears to be based on a combination of teachings selected from multiple patents in an attempt to arrive at the claimed invention. Since there is no teaching nor suggestion for the combination of Bukowsky, Tull and Downes, the Section 103 rejection appears to be based on a hindsight reconstruction in which isolated disclosures have been picked and chosen in an attempt to deprecate the present invention. Of course, such a combination is impermissible, and for this reason also, Applicants request that the Section 103 rejection of Claims 1-10 and 12-42 be withdrawn.

For at least the reasons set for above, Applicants respectfully request that the Section 103 rejection of Claims 1-10 and 12-42 be withdrawn.

In view of the foregoing amendments and remarks, all the claims now active in this application are believed to be in condition for allowance. Reconsideration and favorable action is respectfully solicited.

Respectfully Submitted,



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